(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

(10) International Publication Number WO 2005/039508 A1

- (51) International Patent Classification⁷: C04B 28/00, 24/04
- A61K 6/06,
- (21) International Application Number:

PCT/SE2004/001577

- (22) International Filing Date: 29 October 2004 (29.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0302844-6 0401026-0 29 October 2003 (29.10.2003) SE 22 April 2004 (22.04.2004) SE

- (71) Applicant (for all designated States except US): DOXA AB [SE/SE]; Axel Johanssons Gata 4-6, S-754 51 Uppsala (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HERMANSSON, Leif [SE/SE]; Länna Gård, S-740 11 Länna (SE). EN-GQVIST, Håkan [SE/SE]; Margaretavägen 12, S-741 44 Knivsta (SE). SPENGLER, Håkan [SE/SE]; Torkelsgatan 8B, S-753 29 Uppsala (SE).
- (74) Agent: DR. LUDWIG BRANN PATENTBYRÅ AB; P.O. BOX 171 92, S-104 62 Stockholm (SE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A TWO-STEP SYSTEM FOR IMPROVED INITIAL AND FINAL CHARACTERISTICS OF A BIOMATERIAL

(57) Abstract: A two-step system for chemically bonded ceramic (CBC) materials, and especially a dental filling material or an implant material. The system includes an initial working part-system to provide for improved early-age properties and a second main system to provide for improved end-product properties including bioactivity. The systems interact chemically. The invention also relates to the powdered materials and the hydration liquid, respectively, as well as the formed ceramic material.